

# INTERNATIONAL SEARCH REPORT

International Application No

PCT/EP 03/09125

## A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 C07F17/00 C08F4/60 C08F10/00

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 C07F C08F

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, CHEM ABS Data

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	WO 00 20426 A (UNIV MICHIGAN ;DOW CHEMICAL CO (US)) 13 April 2000 (2000-04-13) page 52, line 24 -page 58, line 19 ----	1-13
Y	WO 00 35928 A (BRAUNSCHWEIG HOLGER ;KRISTEN MARC OLIVER (DE); VON KOBLINSKI CARST) 22 June 2000 (2000-06-22) the whole document ----	1-13
Y	US 5 547 675 A (CANICH JO ANN MARIE) 20 August 1996 (1996-08-20) the whole document ----- -/-	1-13

☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

### \* Special categories of cited documents :

- \*A\* document defining the general state of the art which is not considered to be of particular relevance
- \*E\* earlier document but published on or after the international filing date
- \*L\* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- \*O\* document referring to an oral disclosure, use, exhibition or other means
- \*P\* document published prior to the international filing date but later than the priority date claimed

- \*T\* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- \*X\* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone.
- \*Y\* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
- \*Z\* document member of the same patent family

Date of the actual completion of the international search

19 November 2003

Date of mailing of the international search report

02/12/2003

Name and mailing address of the ISA

European Patent Office, P.B. 5818 Patentlaan 2  
NL - 2280 HV Rijswijk  
Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,  
Fax: (+31-70) 340-3016

Authorized officer

Balmer, J-P

# INTERNATIONAL SEARCH REPORT

International Application No.

PCT/EP 03/09125

## C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
T	<p>BRAUNSCHWEIG H ET AL: "The chemistry of '1'borametallophenes and related compounds"</p> <p>JOURNAL OF ORGANOMETALLIC CHEMISTRY, ELSEVIER-SEQUOIA S.A. LAUSANNE, CH, vol. 680, no. 1-2, 29 August 2003 (2003-08-29), pages 31-42, XP004450650</p> <p>ISSN: 0022-328X</p> <p>the whole document</p>	1-13
Y	<p>-----</p> <p>BRAUNSCHWEIG, HOLGER ET AL: "Synthesis and structure of the first '1'boratitanocenes"</p> <p>EUROPEAN JOURNAL OF INORGANIC CHEMISTRY (1999), (1), 69-73 , XP002262142</p> <p>the whole document</p>	1-13
Y	<p>-----</p> <p>DUCHATEAU, ROBERT ET AL: "Synthesis of Cyclopentadienyl-, Indenyl-, and Fluorenylbis(pentafluorophenyl)boranes as Ligands in Titanium and Zirconium Half-Sandwich Complexes. The Crystal Structures of 'C13H9B(C6F5)2.cntdot.t-BuNH2!, 'C13H8SiMe3B(C6F5)2!, and {.eta.5-C5H4B(C6F5)2}TiC13"</p> <p>ORGANOMETALLICS (1997), 16(23), 4995-5005</p> <p>' XP002262143</p> <p>the whole document</p>	1-13
Y	<p>-----</p> <p>ZI, GUOFU ET AL: "Synthesis, Structural Characterization, and Catalytic Property of Group 4 Metal Carborane Compounds with a iPr2NB-Bridged Constrained-Geometry Ligand"</p> <p>ORGANOMETALLICS (2002), 21(19), 3850-3855</p> <p>' XP002262144</p> <p>the whole document</p>	1-13
Y	<p>-----</p> <p>HARTWIG, JOHN F. ET AL: "Structural and Reaction Chemistry of Tungstenocene Boryl Complexes"</p> <p>ORGANOMETALLICS (1996), 15(25), 5350-5358</p> <p>' XP002262145</p> <p>the whole document</p> <p>-----</p>	1-13

# INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/EP 03/09125

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
WO 0020426	A	13-04-2000	AT 248849 T	15-09-2003
			AT 226964 T	15-11-2002
			AU 5706099 A	26-04-2000
			AU 754409 B2	14-11-2002
			AU 5815199 A	26-04-2000
			BR 9914358 A	27-11-2001
			BR 9914771 A	03-07-2001
			CA 2344170 A1	13-04-2000
			CA 2346544 A1	13-04-2000
			CN 1322208 T	14-11-2001
			CN 1329621 T	02-01-2002
			CZ 20011215 A3	17-10-2001
			DE 69903753 D1	05-12-2002
			DE 69903753 T2	20-03-2003
			DE 69911041 D1	09-10-2003
			EP 1119575 A1	01-08-2001
			EP 1141034 A2	10-10-2001
			ES 2188235 T3	16-06-2003
			HU 0104654 A2	28-03-2002
			JP 2002526548 T	20-08-2002
			JP 2002526607 T	20-08-2002
			NO 994875 A	10-04-2000
			NO 994876 A	10-04-2000
			PL 347324 A1	25-03-2002
			PL 348255 A1	20-05-2002
			SK 4462001 A3	07-01-2002
			TR 200100965 T2	21-08-2001
			TW 523519 B	11-03-2003
			WO 0020426 A1	13-04-2000
			WO 0020462 A2	13-04-2000
			US 2003199650 A1	23-10-2003
			US 6376406 B1	23-04-2002
			US 6284905 B1	04-09-2001
			US 2001025115 A1	27-09-2001
			ZA 9906246 A	30-03-2001
			ZA 9906247 A	30-03-2001
WO 0035928	A	22-06-2000	DE 19858016 A1	21-06-2000
			AT 234316 T	15-03-2003
			AU 3039300 A	03-07-2000
			BR 9916281 A	04-12-2001
			CN 1334818 T	06-02-2002
			DE 59904577 D1	17-04-2003
			WO 0035928 A1	22-06-2000
			EP 1140955 A1	10-10-2001
			JP 2002532508 T	02-10-2002
US 5547675	A	20-08-1996	US 5096867 A	17-03-1992
			US 5055438 A	08-10-1991
			CA 2126317 A1	08-07-1993
			DE 69220676 D1	07-08-1997
			DE 69220676 T2	11-12-1997
			EP 0618931 A1	12-10-1994
			ES 2104122 T3	01-10-1997
			JP 2816766 B2	27-10-1998
			JP 7501846 T	23-02-1995
			WO 9313140 A1	08-07-1993
			US 5631391 A	20-05-1997

# INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/EP 03/09125

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US 5547675	A	US 5621126 A	15-04-1997
		US RE37788 E1	09-07-2002
		US RE37400 E1	02-10-2001
		US 6423795 B1	23-07-2002
		US 6632898 B1	14-10-2003
		US 6265338 B1	24-07-2001
		US 6617466 B1	09-09-2003
		US 5264405 A	23-11-1993
		AT 141275 T	15-08-1996
		AT 151429 T	15-04-1997
		AU 6248390 A	21-03-1991
		AU 643237 B2	11-11-1993
		AU 6443990 A	18-04-1991
		BR 9004537 A	10-09-1991
		BR 9007642 A	21-07-1992
		CA 2024899 A1	14-03-1991
		CA 2065745 A1	14-03-1991
		DE 69028057 D1	19-09-1996
		DE 69028057 T3	25-01-2001
		DE 69030442 D1	15-05-1997
		DE 420436 T1	15-02-1996
		DE 662484 T1	27-06-1996
		DK 420436 T3	02-12-1996
		DK 491842 T3	27-10-1997
		EP 0420436 A1	03-04-1991
		EP 0491842 A1	01-07-1992
		EP 0662484 A2	12-07-1995
		EP 0671404 A2	13-09-1995
		EP 0643066 A2	15-03-1995
		ES 2091801 T3	16-11-1996
		ES 2079332 T1	16-01-1996
		FI 109705 B1	30-09-2002
		GR 3021539 T3	28-02-1997
		GR 3034632 T3	31-01-2001
		HU 55791 A2	28-06-1991
		IL 119415 A	01-06-2000
		JP 3188092 A	16-08-1991